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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,555	08/14/2001	James P. Janniello	YOR920010026US2	9835

7590 11/17/2005  
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EXAMINER

REILLY, SEAN M

ART UNIT PAPER NUMBER

2153

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/929,555	<b>Applicant(s)</b> JANNIELLO ET AL.	
	<b>Examiner</b> Sean Reilly	<b>Art Unit</b> 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office action is in response to Applicant's amendment and request for reconsideration filed on 9/9/2005. Claims 1-24 are presented for further examination. All independent claims have been amended.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
2. Claims 19-20 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 18, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., a recordable medium) and intangible embodiments (e.g., transmission medium). As such, the claims are not limited to statutory subject matter and are therefore non-statutory.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2153

4. Claims 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. With regard to claims 21-24, the limitation “a state of a cache model” renders the claims indefinite since a *cache model* is not defined in the specification.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-7, 11, 13-22, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations).
4. With regard to claims 1, 17, and 19, Nations disclosed a method for selecting digital content for broadcast delivery to multiple users, said method comprising the steps of:
  - identifying content of interest to multiple users (Col 10, lines 53-56); and
  - broadcasting said content of interest to multiple users (Col 9, line 64 – Col 10, line 7) for storage in a client-side cache (Col 8, lines 52-58) wherein said broadcast of said content is prioritized based on a hit rate of said content (e.g. sending the most requested web pages, Col 10, lines 1-8).

5. With regard to claim 5, Nations disclosed a method for selecting digital content for broadcast delivery to multiple users, said method comprising the steps of:

- specifying a server cache (e.g. a gateway cache, Figure 1, Component 17) size limit (Col 5, lines 3-10, required for storage in the cache);
- identifying content of interest to multiple users (Col 10, lines 53-56);
- limiting said content of interest to said server cache size limit (Col 5, lines 3-10, required for storage in the cache); and
- broadcasting said content of interest to multiple users for storage (Col 9, line 64 – Col 10, line 7) in a client-side cache (Col 8, lines 52-58) (Applicant's attention is drawn to the definition of a "local proxy server" Col 8, line 66- Col 9, line 5), wherein said broadcast of said content is prioritized based on a hit rate of said content (e.g. sending the most requested web pages, Col 10, lines 1-8).

6. With regard to claims 11, 18, and 20, Nations disclosed a method for storing digital content in a client-side cache, said method comprising the steps of:

- receiving content broadcast from a central server (Col 9, line 64 – Col 10, line 7), wherein said broadcast of said content is prioritized based on a hit rate of said content (e.g. sending the most requested web pages, Col 10, lines 1-8);
- storing said received content in said client-side cache (Col 10, lines 56-65) if said content is of interest to a user (Col 10, lines 46-56);
- determining if requested content is in said client-side cache before requesting said content from a remote source (use of a cache, Col 9, lines 19-25).

Art Unit: 2153

7. With regard to claims 2, 3, 6, 7, 12, and 13, Nations disclosed the step of identifying content of interest to multiple users further comprises the step of statistically analyzing recent user requests for content or the step of a user profile (Col 10, lines 53-56).

8. With regard to claim 14, Nations disclosed the step of requesting said content from an edge server (e.g. Gateway Figure 1) if said requested content is not in said client-side cache (Col 9, lines 19-25).

9. With regard to claim 15, Nations disclosed the step of requesting said content from a provider of said content if said requested content is not in said client-side cache (Col 10, lines 9-19).

10. With regard to claim 16, Nations disclosed the step of requesting said content from said remote source using a lower capacity link than a link that receives said content broadcast from a central server (Col 9, lines 6-18).

11. With regard to claims 21-22 and 24, Nations disclosed said broadcast of said content is based on one or more of the following: a refresh rate and a time of last broadcast, a state of a cache model, and a broadcast profile (e.g. sending the most requested web pages, Col 10, lines 1-8).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4, 8-10, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations) and Sen et al. (U.S. Patent Number 6,691,312; hereinafter Sen).

13. With regard to claims 4 and 8, Nations disclosed a method for selecting digital content for broadcast delivery to a plurality of client-side caches, said method comprising the steps of:

- identifying content of interest to multiple users (Col 10, lines 53-56); and
- broadcasting said content of interest to said plurality of client-side caches (Col 9, line 64 – Col 10, line 7), wherein said broadcast of said content is prioritized based on a hit rate of said content (e.g. sending the most requested web pages, Col 10, lines 1-8).

However Nations failed to specifically recite:

- specifying an estimated client-side cache size limit;
- broadcasting until said estimated client-side cache size limit is reached;
- waiting for a drain interval when said estimated client-side cache size limit is reached.

In an analogous art, Sen disclosed a system for broadcasting content to multiple users simultaneously based on a derived transmission schedule (Abstract). Sen determines an estimated client-side cache size limit (buffer size, Col 15-18) for use in developing an optimized (smoothed) broadcast schedule (Col 2, lines 4-12). The broadcast schedule in Sen's system, broadcasts content to clients in intervals such that clients (node children) can appropriately drain (consume) content in the cache (i.e. broadcasting until the cache is full and then continuing after a time period – transmission variability) (see inter alia, Col 3, lines 29-48 and Col 8, Section A). It would have been obvious to one of ordinary skill in the art at the time of the invention to

Art Unit: 2153

incorporate the broadcast transmission scheduling disclosed by Sen within Nations system, since the total transmission bandwidth requirements will be reduced (Sen Col 3, lines 44-48).

14. With regard to claims 9 and 10, Nations disclosed the step of identifying content of interest to multiple users further comprises the step of statistically analyzing recent user requests for content or the step of a user profile (Col 10, lines 53-56).

15. With regard to claim 23, claim 23 is rejected using a similar rationale as used with respect to claims 21-22 and 24.

16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nations et al. (U.S. Patent Number 6,879,808; hereinafter Nations) and Shimomura et al. (U.S. Patent Number 6,526,580; hereinafter Shimomura).

17. With regard to claim 12, Nations fails to specifically recite storing said received content if said content is of interest to a user compares a category of said content to one or more categories selected by said user. Nevertheless storing content of interest to a user based on categories selected by a user was well known in the art, as evidenced by Shimomura. In an analogous art Shimomura disclosed a content broadcasting service where broadcasted content is stored (cached) if the content matches a category (interest parameters) selected by the user (Col 4, lines 27-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the content storage system disclosed by Shimomura within Nations, in order to reduce communication and computer costs associated with serving large amounts multimedia content (Shimomura Col 2, lines 11-16).



*Response to Arguments*

18. In response to Applicant's request for reconsideration filed on 9/9/2005, the following factual arguments are noted:

- a. Claims 19-20 are directed to statutory subject matter.
- b. Nations, Sen, and Shimomura all fail to teach the broadcast of content is prioritized based on a hit rate.

In response to (a), Examiner respectfully disagrees with Applicant. A *computer readable medium* as defined by Applicant on pg 18 of the specification may be a recordable medium or a transmission medium. As previously indicated, a transmission medium is not a tangible medium. Thus, the claims are not limited to statutory subject matter and are therefore non-statutory.

In response to (b), Examiner disagrees with Applicant. Nations clearly disclosed the broadcast of content is prioritized based on a hit rate. For instance Nations broadcasts only the most requested web pages to users (Col 10, lines 1-8). Clearly the content broadcast is prioritized since infrequently requested pages are not broadcast. Further the content broadcast is prioritized based *on a hit rate* (the number of times a webpage has been requested). Applicant should note that while the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Accordingly a *hit rate* is not limited to an *exemplary implementation*

Art Unit: 2153

recited in Applicant's specification, as Applicant appears to allude to in the arguments filed 9/9/2005 pgs 9 and 10. If the Applicant wishes to further limit the scope of the term *hit rate* to a recent hit rate and moreover to a recent hit rate as "*computed by dividing the number of URL hits (as measured by the cache over the past hour) by the previous all time peak rate for any URL over any,*" then Applicant should include such limitations in the claims.

### ***Conclusion***

19. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

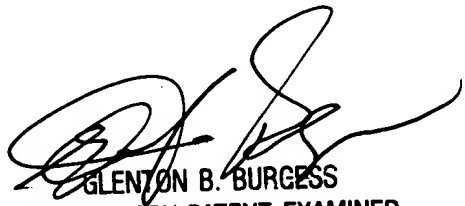
Art Unit: 2153

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/8/2005

  
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